

**FACE PIPING**

**INCLUDE ALL PIPE, FITTINGS, AND VALVES TO CONNECT PUMP AND FILTER TOGETHER**

	<b>EQUIV. LIN. FT.</b>	<b>FT. OF HEAD</b>
_____ lineal feet of _____ inch diameter pipe.....	_____	
_____ ell(s) 45 _____ inch, each equivalent to _____ feet of straight pipe – total.....	_____	
_____ ell(s) 90 _____ inch, each equivalent to _____ feet of straight pipe – total.....	_____	
_____ tee(s) _____ inch, each equivalent to _____ feet of straight pipe – total.....	_____	
_____ adapter(s) _____ inch, each equivalent to _____ feet of straight pipe – total.....	_____	
_____ reduction(s) _____ inch to _____ inch—loss in feet of head.....	_____	
_____ enlargement(s) _____ inch to _____ inch—loss in feet of head.....	_____	
_____ valve(s) _____ inch, each equivalent to _____ feet of straight pipe – total.....	_____	
_____ _____ inch, each equivalent to _____ feet of straight pipe – total.....	_____	
_____ multiport valve(s) _____ inch—loss in feet of head.....	_____	
_____ filter(s) _____ sq. feet surface area—loss in feet of head.....	_____	
_____ pump strainer inlet _____ inch—loss in feet of head.....	_____	
_____ pump strainer basket _____ inch—loss in feet of head.....	_____	
_____ _____ inch—loss in feet of head.....	_____	
Equivalent length of face piping—total (add all equivalent lineal feet for this section).....	_____	
Loss in feet of head due to friction in _____ feet of _____ inch pipe at _____ gpm.....	_____	
Velocity through main drain piping _____ feet/sec.		

**NOTES:**

1. Use the flow from step 11 as the gpm for this section.
2. Velocity through pressure side of system shall not exceed 10 feet per second, 6 feet per second for copper.